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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/578,920

08/15/2006

Kazunori Fukumura

TAM-061

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KUBOVCIK & KUBOVCIK

SUITE 1105

1215 SOUTH CLARK STREET

ARLINGTON, VA 22202

EXAMINER

ZHENG, LOIS L

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/578,920	Applicant(s) FUKUMURA ET AL.	
	Examiner LOIS ZHENG	Art Unit 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/9/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

1. New claims 13-16 are added in view of applicant's preliminary amendment filed 9 May 2006. Therefore, claims 1-16 are currently under examination.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 6-8, 10-11 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 01/83849, whose corresponding US Patent is Fukumura et al. US 6,787,192 B2 (Fukumura).

Note: The rejection grounds presented in this Office Action rely on teachings from Fukumura since WO01/83849 is in Japanese.

Fukumura teaches a process for treating magnesium and/or magnesium alloy surfaces, wherein the treatment process comprises the claimed process steps such as deburring, treating with a surface treating agent, treating with a pre-treating agent, treating with a corrosion inhibiting agent, coating /plating and assembling(col. 2 lines 22-51 and col. 3 lines 5-15). Fukumura further teaches that the Mg surfaces are washed with water in between each of the treatment steps(col. 3 lines 1-4). In addition, Fukumura further teaches that the claimed triazole and/or pyrazole compounds can be added to the surface treating agent and the corrosion inhibiting agent(col. 4 lines 53-58,

col. 6 lines 55-60). Preferred triazole and pyrazole compounds are 3,5-dimethylpyrazole, 3-methyl-5-hydroxypyrazole, 3-mercapto-1,2,4-triazole, and/or 3-hydroxy-1,2,4-triazole(col. 5 line 57 – col. 6 line 12).

Therefore, Fukumura teaches the claimed corrosion inhibitor and the claimed process as recited in claims 1-4, 6-8, 10-11 and 14.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5, 9, 12-13 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 01/83849, whose corresponding US Patent is Fukumura et al. US 6,787,192 B2 (Fukumura).

The teachings of Fukumura are discussed in paragraph 3 above.

Regarding claim 5, even though Fukumura does not explicitly teach the claimed 4-amino-1,2,4-triazole as recited in claim 5, one of ordinary skill in the art would have found the use of claimed 4-amino-1,2,4-triazole obvious and with expected success since Fukumura teaches that suitable triazole compounds are 1,2,4-triazole compounds which includes the claimed 4-amino-1,2,4-triazole as recited in claim 5.

Regarding claims 9 and 12-13, even though Fukumura does not explicitly teach the applying the corrosion inhibitor at least twice as claimed, one of ordinary skill in the art would have found it obvious to have applied the corrosion inhibition treatment of

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Fukumura multiple times in order to achieve a thicker corrosion protective coating layer on the metal surface.

Regarding claims 15-16, the instant claims are rejected for the same reasons as set forth in the rejection of claims 10 and 14 above.

Double Patenting

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1-16 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4, 6, 9, 14-17, 21 and 24-25 of U.S.

Patent No. 6, 787,182 B2(Fukumura). Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1-4, 6, 9, 14-17, 21 and 24-25 of Fukumura teaches using a 1,2,4-triazole, preferably 3-mercapto-1,2,4-triazole in a corrosion inhibitor for a magnesium surface treatment process that is the either the

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same or substantially the same as the process recited in the instant claims. Even though Fukumura does not explicitly teach some of the claimed types of triazole and pyrazole, one of ordinary skill in the art would have found the use of the claimed triazole and pyrazole compounds with expected success since the triazole and pyrazole compounds as taught by Fukumura encompass the claimed specific types of triazole and pyrazoles. In addition, one of ordinary skill in the art would have found it obvious to have applied the corrosion inhibitor as taught by Fukumura multiple times in order to achieve a thicker corrosion protective coating layer on the metal surface.

8. Claims 1-7 and 9 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 3, 5 and 9-16 of U.S. Patent No. 6, 569,264 B1(US'264). Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 3, 5 and 9-16 of US'264 teaches using a 1,2,4-triazole in a corrosion inhibitor for a magnesium surface treatment process that is the either the same or substantially the same as the process recited in the instant claims 1-7 and 9. Even though US'264 does not explicitly teach some of the claimed types of triazole and pyrazole, one of ordinary skill in the art would have found the use of the claimed triazole and pyrazole compounds with expected success since the triazole and pyrazole compounds as taught by US'264 encompass the claimed specific types of triazoles and pyrazoles. In addition, one of ordinary skill in the art would have found it obvious to have applied the corrosion inhibitor as taught by US'264 multiple times in order to achieve a thicker corrosion protective coating layer on the metal surface.

9. Claims 8 and 10-16 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 3, 5 and 9-16 of U.S. Patent No. 6, 569,264 B1(US'264) in view of Fukumura.

The teachings of US'264 are discussed in paragraph 8 above. However, US'264 does not explicitly teach the claimed treating with a pre-treating agent and the claimed water rinse in-between the treatment steps.

The teachings of Fukumura are discussed in paragraphs 3, 5 and 7 above.

Therefore, it would have been obvious to one of ordinary skill in the art to have incorporated the pre-treating step and the water rinsing steps as taught by Fukumura into the process of US'264 in order to enhance the corrosion inhibition of the magnesium surfaces as taught by Fukumura(col. 3 lines 30-36) and to wash away the excess treatment solutions in-between the treatment steps.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LOIS ZHENG whose telephone number is (571)272-1248. The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Roy King/
Supervisory Patent Examiner, Art
Unit 1793

LLZ
7/30/08